IN THE SPECIFICATION

Please amend the Title as follows:

-- SYSTEM AND METHOD FOR ~~CURRENT MODE~~ CONTROLLING ~~SWITCHING REGULATOR~~ AN OUTPUT VOLTAGE ACROSS A LOAD --

*Please amend paragraph **[0010]** of the Specification, as follows:*

[0010] Figure 2 is a block diagram illustrating a switching current amplifier and certain other components of the current mode control switching regulator of figure 1, in a system for controlling an output voltage across a load.

*Please amend paragraph **[0011]** of the Specification, as follows:*

[0011] Figure 3 is a block diagram illustrating an exemplary ~~switching regulator~~ circuit of the switching regulator of Figures 1 and 2, including an error amplifier.

*Please amend paragraph **[0013]** of the Specification, as follows:*

[0012] Figure 5 is a schematic diagram illustrating an exemplary embodiment of ~~an~~the error amplifier of Figure 3. --

*Please amend paragraph **[0014]** of the Specification, as follows:*

[0014] Figure 6 illustrates one embodiment of the switching current amplifier of ~~figure~~Figure 2. --

*Please amend paragraph **[0016]** of the Specification, as follows:*

[0016] Figure 8 is a block diagram illustrating one embodiment of the switching current amplifier ~~circuit~~of Figure 6, including comparators for comparing voltage drops across reference FETs with voltage drops across power FETs. --

*Please amend paragraph **[0017]** of the Specification, as follows:*

[0017] Figure 9 is a block diagram illustrating one current sensing circuit involving a comparator of Figure 8.

*Please amend paragraph **[0018]** of the Specification, as follows:*

[0018] Figure 10 is a block diagram illustrating one exemplary circuit used

to determine when the output voltage is within a specified tolerance of the desired voltage, in the switching regulator of Figures 1 and 2.

*Please amend paragraph **[0019]** of the Specification, as follows:*

[0019] Figure 11 is a schematic diagram of one exemplary ~~switching regulator~~ circuit of the switching regulator of Figures 1 and 2.

*Please amend paragraph **[0024]** of the Specification, as follows:*

[0024] Figure 2 is a block diagram illustrating certain components of the current mode control switching regulator 14 of figure 1, in a system 100 for controlling an output voltage across a load. System 100 for example uses current mode control to control current through an output filter connected to the load. In figure 2, output voltage VOUT is sensed as VSENSE and compared to a desired output voltage VDES by a voltage controller 32. Voltage controller 32 generates a control signal VAVG indicative of a desired average current through an output filter 34 such that output voltage VOUT equals VDES. Switching regulator 14 includes a switching current amplifier 22 that has a current controller 30 and a differential current sensor 28. Current controller 30 operates to alternately connect output filter 34 to VIN and GND, via differential current sensor 28, thereby regulating average current through output filter 34. Differential current sensor 28 measures the current through output filter 34 and provides a feedback signal ISENSE to current controller 30. Current controller 30 compares feedback signal ISENSE with the desired average current indicated by control signal VAVG to implement the alternating connection between output filter 34 and VIN or GND.

*Please amend paragraph **[0025]** of the Specification, as follows:*

[0025] Figure 3 depicts an exemplary circuit 102 (indicated by a dotted box), including one embodiment of switching regulator 14, figure 2. In circuit 102, switching regulator 14 couples to a voltage source 106 at a voltage input terminal 108, and a ground power rail GND at a terminal 107. An output terminal 116 of regulator 14 couples to a load 112 through an inductor 110. A load capacitor 114 connects in parallel with load 112, as shown. Load capacitor 114 and inductor 110 cooperate to form output filter 34 that operates to remove high frequency switching noise, generated by switching regulator 14, from output voltage VOUT. The average current IIND through

inductor 110 equals the average current IOUT through load 112. In the exemplary embodiment, current IIND has a triangular waveform.

*Please amend paragraph **[0032]** of the Specification, as follows:*

[0032] Figure 4 is a schematic diagram of a circuit 300 showing exemplary detail of switching regulator 14, including circuitry to facilitate generation of output voltage reference VDES. In the illustrated example of figure 4, a resistor sensing circuit 302 includes an amplifier 304 connected to a band-gap voltage VBG and a FET 306. VBG is, for example, 1.23 volts and generated by reference source 919, shown in FIG. 11. Sensing circuit 302 applies voltage VBG across an external resistor 316 via terminal 113, generating a current IBIAS through resistor 316. Sensing circuit 302 also operates to control FETs 308 and 310 such that current IBIAS is mirrored through a terminal 111, and, thereby, through a reference resistor 312. Current IBIAS generates a voltage across resistor 312 which is input as VDES to terminal 109, as shown. By selection of resistors 312 and 316, desired output voltage reference VDES may be selected. In one embodiment, voltage VDES at terminal 109 is determined by VDES = VBG*(RREF/RBIAS), where RREF is the resistance of resistor 312 and RBIAS is the resistance of resistor 316. Accordingly, the output voltage VOUT across load 112 may equal VDES minus a voltage droop caused by resistor 120, as defined in the following equation:--

*Please amend paragraph **[0035]** of the Specification, as follows:*

[0035] Figure 8 is a schematic diagram illustrating one embodiment of a switching current amplifier 126B suitable for use as switching current amplifier 22, figure 6, for example. The embodiment of figure 8 illustrates an exemplary class B drive circuit for controlling output current IOUT. Switching current amplifier 126B includes two switching elements 606 and 608 that connect output 640 to either VIN or GND. Switching current amplifier 126B also includes two sensing elements 602 and 604 that sense both positive and negative currents in switching elements 606 and 608. Sensing elements 602 and 604, for example, may be used as differential current sensor 28, figures 2, 3, 6 (current sensor 28 is indicated by a dotted box in FIG. 8). --

*Please amend paragraph **[0047]** of the Specification, as follows:*

[0047] Figure 11 illustrates an exemplary embodiment of a switching regulator 14. Power is supplied to switching regulator 14 at a terminal 903 (VIN), and a

load ~~904~~ 962, with a capacitor 960 connected in parallel, connects to an output terminal 902 (VX) through an inductor 910. Inductor 910 and capacitor 960 cooperate to form an output filter (e.g., output filter 34, figure 2). A resistor 914 connects between a terminal 904 (VFB) and load ~~904~~ 962 at SENSE+ and operates to provide feedback of voltage across load ~~904~~ 962. A resistor 930 connects between a terminal 908 (PGIN) and SENSE + and cooperates with a 'powergood' amplifier 944 to provide feedback to control logic 942, which determines whether VOUT is within a desired tolerance of a desired output voltage. A resistor 936 connects between a terminal 912 (VREF) and SENSE – of load ~~904~~ 962 to generate the desired reference voltage for switching regulator 14. A resistor 928 may be used to provide "soft-start" capability by slowing the rise time of the desired output voltage VDES reference on terminal 906. Control logic 942 with powergood amplifier 944 generate a status signal at a terminal 922 (STAT). In this example, input terminals 918 (IMAX), 916 (IRIPL) and 914 (BIAS) are connected to GND using resistors 946, 948 and 950, respectively.--